

#7

FORM PTO-1449/A and B (Modified)		FEB 12 2002		APPLICATION NO.: 09/931,583		ATTY. DOCKET NO.: C1039/7053	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE: 08/16/01			
				APPLICANT: Krieg et al.			
				GROUP ART UNIT:		EXAMINER: Unassigned	
Sheet	1	of	8				

U.S. PATENT DOCUMENTS

Examiner's Initials#	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or of issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
DA	*A1	2,215,233	B1	Ruskin	09/17/1940
	A2	3,906,092	B1	Hilleman et al.	09/16/1975
	*A3	3,911,117	B1	Ender	10/07/1975
	*A4	3,914,450	B1	Robbins et al.	10/21/1975
	*A5	4,544,559	B1	Gil et al.	10/01/1985
	*A6	4,741,914	B1	Kimizuka et al.	05/03/1988
	*A7	4,758,553	B1	Ogoshi	07/19/1988
	*A8	4,806,376	B1	Saeki et al.	02/21/1989
	*A9	4,956,296	B1	Fahnestock	09/11/1990
	*A10	4,963,387	B1	Nakagawa et al.	10/16/1990
	*A11	4,994,442	B1	Gil et al.	02/19/1991
	*A12	5,066,500	B1	Gil et al.	11/19/1991
	*A13	5,231,085	B1	Alexander et al.	07/27/1993
	*A14	5,234,811	B1	Beutler et al.	08/10/1993
	A15	5,248,670	B1	Draper et al.	09/28/1993
	*A16	5,268,365	B1	Rudolph et al.	12/07/1993
	*A17	5,288,509	B1	Potman et al.	02/22/1994
	*A18	5,488,039	B1	Masor et al.	01/30/1996
	*A19	5,492,899	B1	Masor et al.	02/20/1996
	*A20	5,585,479	B1	Hoke et al.	12/17/1996
	*A21	5,591,721	B1	Agrawal et al.	01/07/1997
	*A22	5,602,109	B1	Masor et al.	02/11/1997
	*A23	5,612,060	B1	Alexander	03/18/1997
	*A24	5,650,156	B1	Grinstaff et al.	07/22/1997
	*A25	5,663,153	B1	Hutcherson et al.	09/02/1997
	*A26	5,679,397	B1	Kuroda et al.	10/21/1997
	A27	5,684,147	B1	Agrawal et al.	11/04/1997
	*A28	5,700,590	B1	Masor et al.	12/23/1997
	*A29	5,712,256	B1	Kulkarni et al.	01/27/1998
	*A30	5,723,335	B1	Hutcherson	03/03/1998
	*A31	5,786,189	B1	Locht et al.	07/28/1998
	*A32	5,840,705	B1	Tsukuda	11/24/1998
	A33	5,849,719	B1	Carson et al.	12/15/1998
	*A34	5,895,652	B1	Giampapa	04/20/1999
	*A35	5,922,766	B1	Acosta et al.	07/13/1999
	*A36	5,976,580	B1	Ivey et al.	11/02/1999
	*A37	5,980,958	B1	Naylor et al.	11/09/1999

Doc

3/24/03

*A38	6,022,853	B1	Kuberasampath et al.	02/08/2000
A39	6,339,068	B1	Krieg et al.	01/15/2002

FEB 12 2002

FOREIGN PATENT DOCUMENTS

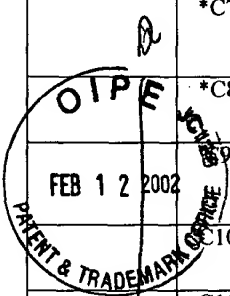
Examiner's Initials#	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document (not necessary)	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/Country	Number	Kind Code			
D	B1	EP	0 286 224	B1	Hem Pharmaceuticals Corp.	10/12/1988	
	*B2	EP	0 302 758	B1	New England Medical Center Hospitals	02/08/1989	
	*B3	WO	91/12811	A1	ISIS Pharmaceuticals, Inc.	09/05/1991	
	*B4	EP	0 468 520	A2	Mitsui Toatsu Chemicals, Inc.	01/29/1992	
	*B5	WO	92/03456	A1	ISIS Pharmaceuticals, Inc.	03/05/1992	
	B6	WO	92/18522	A1	The Salk Institute for Biological Studies	10/29/1992	
	B7	WO	92/21353	A1	Genta Incorporated	12/10/1992	
	*B8	WO	94/19945	A1	ISIS Pharmaceuticals, Inc.	09/15/1994	
	B9	WO	95/05853	A1	The Regents of the University of CA	03/02/1995	
	*B10	WO	95/26204	A1	ISIS Pharmaceuticals, Inc.	10/05/1995	
	*B11	WO	96/02555	A1	University of Iowa Research Foundation	02/01/1996	
	B12	WO	96/35782	A1	Serlupi-Crescenza et al.	11/14/1996	
	B13	WO	97/28259	A1	The Regents of the University of CA	08/07/1997	
	B14	WO	98/14210	A1	The Regents of the University of CA	04/09/1998	
	B15	WO	98/18810	A1	University of Iowa Research Foundation	05/07/1998	
	B16	WO	98/32462	A1	Wagner et al.	07/30/1998	
	B17	WO	98/37919	A1	University of Iowa Research Foundation	09/03/1998	
	B18	WO	98/40100	A1	Ottawa Civic Loeb Research Institute	09/17/1998	
	*B19	WO	98/49348	A1	ISIS Pharmaceuticals, Inc.	11/05/1998	
	B20	WO	98/52581	A1	Ottawa Civic Hospital Loeb Research Inst.	11/26/1998	
	B21	WO	98/55495	A2	Dynavax Technologies Corp.	12/10/1998	
	*B22	WO	99/37151	A1	Board of Regents University of Texas	07/29/1999	
	B23	WO	00/21556	A1	Dynavax Technologies Corp.	04/20/2000	
	B24	WO	00/67787	A2	The Immune Response Corp.	11/16/2000	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials#	Cite No	Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
D	*C1	AGRAWAL, S. et al., "Absorption, Tissue Distribution and <i>In Vivo</i> Stability in Rats of a Hybrid Antisense Oligonucleotide Following Oral Administration", <i>Biochemical Pharmacology</i> , 1995, Pages 571-576, Vol. 50, No. 4	
	*C2	AGRAWA., S., "Antisense Oligonucleotides: Toward Clinical Trials", <i>Tibtech</i> , 1996, Pages 376-387, Vol. 14	
	*C3	AGRAWA, S. et al., "Pharmacokinetics of Oligonucleotides", <i>Ciba. Found. Symp.</i> , 1997, Pages 60-78, Vol. 209	
	*C4	AGRAWA, S. et al., "Pharmacokinetics and Bioavailability of Antisense Oligonucleotides Following Oral and Colorectal Administration of Experimental Animals", <i>Handb. Exp. Pharmacol.</i> , 1998, <i>Antisense Research and Application</i> , Pages 525-543, Vol. 131	
	*C5	ANDERSON, W.F., "Human Gene Therapy", April 30, 1998, <i>Nature</i> , Pages 25-30, Vol. 392	
	*C6	ANFOSSI, G. et al., "An oligomer complementary to <i>c-myc</i> -encoded mRNA inhibits proliferation of human myeloid leukemia cell lines", <i>Proc. Natl. Acad. Sci. USA</i> , May 1989, Pages 3379-3383, Vol. 86	

Doh

3/20/03

	*C7	AZAD, R.F. et al., "Antiviral Activity of a Phosphorothioate Oligonucleotide Complementary to RNA of the Human Cytomegalovirus Major Immediate-Early Region", <i>Antimicrobial Agents and Chemotherapy</i> , 1993, Pages 1945-1954, Vol. 37		
	*C8	AZUMA, I., "Biochemical and Immunological Studies on Cellular Components of Tubercle Bacilli", <i>Kekkaku</i> , 1992, Pages 45-55, Vol. 67, No. 9		
	*C9	BALLAS, Z.K. et al., "Induction of NK Activity in Murine and Human Cells by CpG Motifs in Oligodeoxynucleotides and Bacterial DNA", <i>The Journal of Immunology</i> , 1996, Pages 1840-1845, Vol. 157, No. 5, The American Association of Immunologists		
	*C10	BAROUCH, D.H. et al., "Control of Viremia and Prevention of Clinical AIDS in Rhesus Monkeys by Cytokine-Augmented DNA Vaccination", <i>Science</i> , October 20, 2000, Pages 486-492, Vol. 290		
	C11	BAYEVER, E. et al., "Systemic Administration of a Phosphorothioate Oligonucleotide with a Sequence Complementary to p53 for Acute Myelogenous Leukemia and Myelodysplastic Syndrome: Initial Results of a Phase I Trial", <i>Antisense Research and Development</i> , 1993, Pages 383-390, Vol. 3, Mary Ann Liebert, Inc.		
	C12	BLANCHARD, D.K. et al., "Interferon- γ Induction by Lipopolysaccharide: Dependence on Interleukin 2 and Macrophages", <i>The Journal of Immunology</i> , February 1, 1986, Pages 963-970, Vol. 136, No. 3, The American Association of Immunologists USA		
	*C13	BLAXTER, M.L. et al., "Genes expressed in <i>Brugia malayi</i> infective third stage larvae", <i>Molecular and Biochemical Parasitology</i> , 1996, Pages 77-93, Vol. 77		
	C14	BOGGS, R.T. et al., "Characterization and Modulation of Immune Stimulation by Modified Oligonucleotides", <i>Antisense & Nucleic Acid Drug Development</i> , 1997, Pages 461-471, Vol. 7, Mary Ann Liebert, Inc.		
	*C15	BOIARKINA, L.G. et al., "Dietary supplementals from ground fish meat with DNA for treatment and prophylaxis", <i>Vopr. Pitan</i> , January-February 1998, Pages 29-31, Vol. (1), Abstract		
	*C16	BRANDA, R.F. et al., "Immune Stimulation by an Antisense Oligomer Complementary to the <i>rev</i> gene of HIV-1", <i>Biochemistry Pharmacology</i> , 1993, Pages 2037-2043, Vol. 45, No. 10		
	C17	BRANDA, R.F. et al., "Amplification of antibody production by phosphorothioate oligodeoxynucleotides", <i>J. Lab. Clin. Med.</i> , September 1996, Pages 329-338, Vol. 128, No. 3, Mosby-Year Book, Inc.		
	C18	CALAROTA, S.A. et al., "Immune Responses in Asymptomatic HIV-1-Infected Patients After HIV-DNA Immunization Followed by Highly Active Antiretroviral Treatment", <i>The Journal of Immunology</i> , August 15, 1999, Pages 2330-2338, Vol. 163, No. 4, The American Association of Immunologists		
	*C19	CHACE, J.H. et al., "Regulation of Differentiation in CD5+ and Conventional B Cells - Sensitivity to LPS-Induced Differentiation and Interferon- γ -Mediated Inhibition of Differentiation", <i>Clinical Immunology and Immunopathology</i> , September 1993, Pages 327-332, Vol. 68, No. 3, Academic Press, Inc.		
	C20	CHANG, Y.N., et al., "The Palindromic Series I Repeats in the Simian Cytomegalovirus Major Immediate-Early Promoter Behave as Both Strong Basal Enhancers and Cyclic AMP Response Elements", <i>Journal of Virology</i> , January 1990, Pages 264-277, Vol. 64, No. 1, American Society for Microbiology		
	*C21	CHU, R.S. et al., "CpG Oligodeoxynucleotides Act as Adjuvants that Switch on T Helper 1 (Th1) Immunity", <i>J. Exp. Med.</i> , November 17, 1997, Pages 1623-1631, Vol. 186, No. 10, The Rockefeller University Press		
	C22	CHUN, T.W. et al., "Effect of interleukin-2 on the pool of latently infected, resting CD4+ T cells in HIV-1-infected patients receiving highly active anti-retroviral therapy", <i>Nature Medicine</i> , June 1999, Pages 651-655, Vol. 5, No. 6		
	C23	CHUN, T.W. et al., "Perspective: Latent reservoirs of HIV: Obstacles to the eradication of virus", <i>Proc. Natl. Acad. Sci. USA</i> , September 1999, Pages 10958-10961, Vol. 96		
	C24	COHEN, J., "Exploring How to Get at - and Eradicate - Hidden HIV", <i>Science</i> , March 20, 1998, Pages 1854-1855, Vol. 279		
	C25	COOK, R.T. et al., "Effect of a Single Ethanol Exposure on HIV Replication in Human Lymphocytes", <i>Journal of Investigative Medicine</i> , June 1997, Pages 265-271, Vol. 45, No. 5		
	C26	COOPER, D.A. et al., "Therapeutic Strategies for HIV Infection - Time to Think Hard", <i>The New England Journal of Medicine</i> , October 29, 1998, Pages 1319-1321, Vol. 339, No. 18		
	C27	COWDERY, J.S. et al., "Bacterial DNA Induces NK Cells to Produce IFN- γ <i>In Vivo</i> and Increases the Toxicity of Lipopolysaccharides", <i>The Journal of Immunology</i> , June 15, 1996, Pages 4570-4575, Vol. 156, No. 12, The American Association of Immunologists		
	*C28	CRYSTAL, R.G. et al., "Transfer of Genes to Humans: Early Lessons and Obstacles to Success", <i>Science</i> , 1995, Pages 404-410, Vol. 270		
	*C29	CRYZ, S. et al., "Vaccine Delivery System - European Commission COST/STD Initiative Report of the Expert Panel VII", May 1996, <i>Vaccine</i> , Pages 665-690, Vol. 14, No. 7		
	C30	DAVEY, R.T. et al., "HIV-1 and T cell dynamics after interruption of highly active antiretroviral therapy (HAART) in patients with a history of sustained viral suppression", <i>Proc. Natl. Acad. Sci. USA</i> , December 21, 1999, Pages 15109-15114, Vol. 96, No. 26		

OIP FEB 12 2002 PATENT & TRADEMARK OFFICE	*C31	DAVIS, H.L. et al., "CpG DNA is a Potent Enhancer of Specific Immunity in Mice Immunized with Recombinant Hepatitis B Surface Antigen", <i>J. Immunol.</i> , 1998, Pages 870-876, Vol. 160, No. 2, The American Association of Immunologists		
	C32	DEML, L. et al., "Immunostimulatory CpG Motifs Trigger a T Helper-1 Immune Response to Human Immunodeficiency Virus Type-1 (HIV-1) gp160 Envelope Proteins", <i>Clin. Chem. Lab. Med.</i> , 1999, Pages 199-204, Vol. 37, No. 3, Walter de Gruyter - Berlin - NY		
	*C33	DOERFLER, W. et al., "On the Insertion of Foreign DNA into Mammalian Genomes: Mechanism and Consequences", <i>Gene</i> , May 19, 1995, Pages 241-245, Vol. 157, No. 1-2		
	*C34	ECK, S.L. et al., "Chapter 5: Gene-Based Therapy", <i>Goodman & Gilman's The Pharmacological Basis of Therapeutics Ninth Edition</i> , 1996, Pages 77-101		
	C35	ENGLISCH, U. et al., "Chemically Modified Oligonucleotides as Probes and Inhibitors", <i>Angew. Chem. Int. Ed. Eng.</i> , June 1991, Pages 613-629, Vol. 30, No. 6, VCH Verlagsgesellschaft mbH		
	*C36	ETLINGER, H.M., "Carrier Sequence Selection - One Key to Successful Vaccines", <i>Immunology Today</i> , 1992, Pages 52-55, Vol. 13, No. 2		
	*C37	FANSLOW, W.C. et al., "Effect of nucleotide restriction and supplementation on resistance to experimental murine candidiasis", <i>J. Parenter. Enter. Nutr.</i> , January-February 1988, Pages 49-52, Vol. 12, No. 1, Abstract		
	*C38	FILION, M.C. et al., "Major limitations in the use of cationic liposomes for DNA delivery", 1998, <i>International Journal of Pharmaceuticals</i> , Pages 159-170, Vol. 162		
	*C39	FOX, R.I., "Mechanism of Action of Hydroxychloroquine as an Antirheumatic Drug", <i>Chemical Abstracts</i> , 1994, Page 15, Vol. 120, Abstract No. 182630		
	C40	HADDEN, J.W. et al., "Chapter 24: Immunopharmacology: Immunomodulation and Immunotherapy", <i>JAMA</i> , November 25, 1992, Pages 2964-2969, Vol. 268, No. 20		
	C41	HADDEN, J.W., "Immunomodulation: Immunostimulants", <i>TIPS</i> , May 1993, Pages 169-174, Vol. 14, Elsevier Science Publishers Ltd. (UK)		
	C42	HALPERN, M.D. et al., "Bacterial DNA Induces Murine Interferon- γ Production by Stimulation of Interleukin-12 and Tumor Necrosis Factor- α ", <i>Cellular Immunology</i> , 1996, Pages 72-78, Vol. 167, Article No. 0009, Academic Press, Inc.		
	C43	HASLETT, P.A.J. et al., "Strong Human Immunodeficiency Virus (HIV)-Specific CD4+ T Cell Responses in a Cohort of Chronically Infected Patients are Associated with Interruptions in Anti-HIV Chemotherapy", <i>The Journal of Infectious Diseases</i> , 2000, Pages 1264-1272, Vol. 181, Infectious Diseases Society of America		
	C44	HATZFELD, J. et al., "Release of Early Human Hematopoietic Progenitors from Quiescence by Antisense Transforming Growth Factor β 1 or Rb Oligonucleotides", <i>J. Exp. Med.</i> , October 1991, Pages 925-929, Vol. 174, The Rockefeller University Press		
	C45	HAVLIR, D.V. et al., "Maintenance Antiretroviral Therapies in HIV-Infected Subjects with Undetectable Plasma HIV RNA After Triple-Drug Therapy", <i>The New England Journal of Medicine</i> , October 29, 1998, Pages 1261-1268, Vol. 339, No. 18, Massachusetts Medical Society		
	C46	HIGHFIELD, P.E., "Sepsis: The More, the Murkier", <i>Bio/Technology</i> , August 1994, Page 828, Vol. 12		
	C47	HO, D.D., "Toward HIV Eradication or Remission: The Tasks Ahead", <i>Science</i> , June 19, 1998, Pages 1866-1867, Vol. 280		
	C48	IMAMI, N. et al., "Assessment of Type 1 and Type 2 Cytokines in HIV Type 1-Infected Individuals: Impact of Highly Active Antiretroviral Therapy", <i>AIDS Research and Human Retroviruses</i> , 1999, Pages 1499-1508, Vol. 15, No. 17, Mary Ann Liebert, Inc.		
	C49	ISHIKAWA, R. et al., "IFN Induction and Associated Changes in Splenic Leukocyte Distribution", <i>The Journal of Immunology</i> , May 1, 1993, Pages 3713-3727, Vol. 150, No. 9, The American Association of Immunologists USA		
	C50	IVERSEN, P.L. et al., "Pharmacokinetics of an Antisense Phosphorothioate Oligodeoxynucleotide against <i>rev</i> from Human Immunodeficiency Virus Type 1 in the Adult Male Rat Following Single Injections and Continuous Infusion", <i>Antisense Research and Development</i> , 1994, Pages 43-52, Vol. 4, Mary Ann Liebert, Inc.		
	C51	JAKWAY, J.P. et al., "Growth Regulation of the B Lymphoma Cell Line WEHI-231 By Anti-Immunoglobulin, Lipopolysaccharide, and Other Bacterial Products", <i>The Journal of Immunology</i> , October 1, 1986, Pages 2225-2231, Vol. 137, No. 7, The American Association of Immunologists USA		
	C52	JAROSZEWSKI, J.W. et al., "Cellular uptake of antisense oligodeoxynucleotides", <i>Advanced Drug Delivery Reviews</i> , 1991, Pages 235-250, Vol. 6, Elsevier		
	*C53	KATAOKA, T. et al., "Antitumor Activity of Synthetic Oligonucleotides with Sequences from cDNA Encoding Proteins of <i>Mycobacterium bovis</i> BCG", <i>Jpn. J. Cancer Res.</i> , 1992, Pages 244-247, Vol. 83		
	*C54	KIMURA, Y. et al., "Binding of Oligoguanylate to Scavenger Receptors is Required for Oligonucleotides to Augment NK Cell Activity and Induce IFN", <i>J. Biochem.</i> , 1994, Pages 991-994, Vol. 116, No. 5		

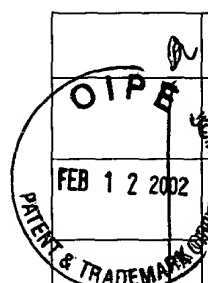
Dor

3/20/03

OIPF FEB 12 2002 PATENT & TRADEMARK OFFICE	C55	KLINMAN, D.M. et al., "CpG motifs present in bacterial DNA rapidly induce lymphocytes to secrete interleukin 6, interleukin 12, and interferon γ ", <i>Proc. Natl. Acad. Sci. USA</i> , April 1996, Pages 2879-2883, Vol. 93		
	C56	KLINMAN, D.M. et al., "Immune Recognition of Foreign DNA: A Cure for Bioterrorism?", <i>Immunity</i> , August 1999, Pages 123-129, Vol. 11, Cell Press		
	C57	KREIG, A.M. et al., "A Role for Endogenous Retroviral Sequences in the Regulation of Lymphocyte Activation", <i>The Journal of Immunology</i> , October 1989, Pages 2448-2451, Vol. 143, No. 8, The American Association of Immunologists		
	C58	KRIEG, A.M. et al., "Uptake of Oligodeoxyribonucleotides by Lymphoid Cells is Heterogeneous and Inducible", <i>Antisense Research and Development</i> , 1991, Pages 161-171, Vol. 1, Mary Ann Liebert, Inc.		
	C59	KRIEG, A.M. et al., "Modification of antisense phosphodiester oligodeoxynucleotides by a 5' cholesteryl moiety increases cellular association and improves efficacy", <i>Proc. Natl. Acad. Sci. USA</i> , February 1993, Pages 1048-1052, Vol. 90		
	C60	KRIEG, A.M. et al., "Phosphorothioate Oligodeoxynucleotides: Antisense or Anti-Protein?", <i>Antisense Research and Development</i> , 1995, Page 241, Vol. 5, Mary Ann Liebert, Inc.		
	C61	KRIEG, A.M., "CpG DNA: A Pathogenic Factor in Systemic Lupus Erythematosus?", <i>Journal of Clinical Immunology</i> , 1995, Pages 284-292, Vol. 15, No. 6		
	*C62	KRIEG, A.M. et al., "CpG Motifs in Bacterial DNA Trigger Direct B-cell Activation", <i>Nature</i> , 1995, Pages 546-549, Vol. 374		
	*C63	KRIEG, A.M. et al., "Brief Communication: Oligodeoxynucleotide Modifications Determine the Magnitude of B Cell Stimulation by CpG Motifs", <i>Antisense & Nucleic Acid Drug Delivery Development</i> , 1996, Pages 133-139, Vol. 6		
	C64	KRIEG, A.M., "An innate immune defense mechanism based on the recognition of CpG motifs in microbial DNA", <i>J. Lab. Clin. Med.</i> , 1996, Pages 128-133, Vol. 128		
	C65	KRIEG, A.M. et al., "The role of CpG dinucleotides in DNA vaccines", <i>Trends in Microbiology</i> , January 1998, Pages 23-27, Vol. 6, No. 1, Elsevier Science Ltd.		
	C66	KRIEG, A.M., Chapter 24: Leukocyte Stimulation by Oligodeoxynucleotides", <i>Applied Antisense Oligonucleotide Technology</i> , 1998, Pages 431-448, Wiley-Liss, Inc.		
	*C67	KUCHAN, M.J. et al., "Nucleotides in Infant Nutrition: Effects of Immune Function", <i>Pediatric Nutrition Pediatr. Adolesc. Med. Basel. Karger</i> , 1998, Pages 80-94, Vol. 8		
	*C68	KULKARNI, A.D. et al., "Effect of dietary nucleotides on response to bacterial infections", <i>J. Parenter. Enteral. Nutr.</i> , March-April 1986, Pages 169-171, Vol. 10, No. 2, Abstract		
	*C69	KURAMOTO, E. et al., "Oligonucleotide Sequences Required for Natural Killer Cell Activation", <i>Jpn. J. Cancer Res.</i> , November 1992, Pages 1128-1131, Vol. 83		
	C70	LEDERGERBER, B. et al., "Clinical progression and virological failure on highly active antiretroviral therapy in HIV-1 patients: a prospective cohort study", <i>The Lancet</i> , March 13, 1999, Pages 863-868, Vol. 353		
	C71	LEDERMAN, M.M., "Is there a role for immunotherapy in controlling HIV infection?", <i>AIDS Read.</i> , April 2000, Pages 209-216, Vol. 10, No. 4, Abstract		
	C72	LEONARD, G.A. et al., "Conformation of Guanine-8-Oxoadenine Base Pairs in the Crystal Structure of d(CGCGAATT(O8A)GCG)", <i>Biochemistry</i> , 1992, Pages 8415-8420, Vol. 31, No. 36, American Chemical Society		
	C73	LI, T.S. et al., "Long-lasting recovery in CDR T-cell function and viral-load reduction after highly active antiretroviral therapy in advanced HIV-1 disease", <i>The Lancet</i> , June 6, 1998, Pages 1682-1686, Vol. 351		
	C74	MACFARLANE, D.E. et al., "Antagonism of Immunostimulatory CpG-Oligodeoxynucleotides by Quinacrine, Chloroquine, and Structurally Related Compounds", <i>The Journal of Immunology</i> , February 1, 1998, Pages 1122-1131, Vol. 160, No. 3, The American Association of Immunologists		
	*C75	MASTRANGELO, M.J. et al., "Gene Therapy for Human Cancer: An Essay for Clinicians", <i>Seminars in Oncology</i> , 1996, Pages 4-21, Vol. 23, No. 1		
	C76	MATSON, S. et al., "Nonspecific Suppression of [3 H]Thymidine Incorporation by "Control" Oligonucleotides", <i>Antisense Research and Development</i> , 1992, Pages 325-330, Vol. 2, Mary Ann Liebert, Inc.		
	*C77	MCCLUSKIE, M.J. et al., "Route and Method of Delivery of DNA Vaccine Influence Immune Responses in Mice and Non-Human Primates", <i>Molecular Medicine</i> , 1999, Pages 287-300, Vol. 5		
	C78	MCINTYRE, K.W. et al., "A Sense Phosphorothioate Oligonucleotide Directed to the Initiation Codon of Transcription Factor NF- κ B p65 Causes Sequence-Specific Immune Stimulation", <i>Antisense Research and Development</i> , 1993, Pages 309-322, Vol. 3, Mary Ann Liebert, Inc.		
	*C79	MESSINA, J.P. et al., "Stimulation of <i>in vitro</i> Murine Lymphocyte Proliferation by Bacterial DNA", <i>The Journal of Immunology</i> , 1991, Pages 1759-1764, Vol. 147, No. 6		

Dob

3/20/03

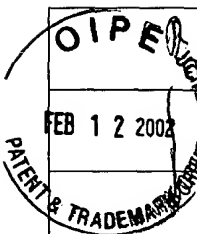
	*C80	MESSINA, J.P. et al., "The Influence of DNA Structure on the <i>in vitro</i> Stimulation of Murine Lymphocytes by Natural and Synthetic Polynucleotide Antigens", <i>Cellular Immunology</i> , 1993, Pages 148-157, Vol. 147		
	C81	MOJCIK, C.F. et al., "Administration of a Phosphorothioate Oligonucleotide Antisense to Murine Endogenous Retroviral MCF <i>env</i> Causes Immune Effects <i>in Vivo</i> in a Sequence-Specific Manner", <i>Clinical Immunology and Immunopathology</i> , 1993, Pages 130-136, Vol. 67, No. 2, Academic Press, Inc.		
	C82	MOSS, R.B. et al., "In vitro immune function after vaccination with an inactivated, gp120-depleted HIV-1 antigen with immunostimulatory oligodeoxynucleotides", <i>Vaccine</i> , 2000, Pages 1081-1087, Vol. 18, Elsevier Science Ltd.		
	*C83	MOTTRAM, J.C. et al., "A Novel CDC2-Related Protein Kinase from <i>Leishmania Mexicana</i> . LmmCRK1. Is Post-Translationally Regulated During the Life Cycle", <i>J. Biol. Chem.</i> , October 5, 1993, Pages 21044-21052, Vol. 268, No. 28		
	C84	OGG, G.S. et al., "Quantitation of HIV-1-Specific Cytotoxic T Lymphocytes and Plasma Load of Viral RNA", <i>Science</i> , March 27, 1998, Pages 2103-2106, Vol. 279		
	C85	PAPASAVVAS, E. et al., "Enhancement of Human Immunodeficiency Virus Type 1-Specific CD4 and CD8 T Cell Responses in Chronically Infected Persons after Temporary Treatment Interruption", <i>The Journal of Infectious Diseases</i> , 2000, Pages 766-775, Vol. 182, Infectious Disease Society of America		
	C86	PIALOUX, G. et al., "A Randomized Trial of Three Maintenance Regimens Given After Three Months of Induction Therapy with Zidovudine, Lamivudine, and Indinavir in Previously Untreated HIV-1-Infected Patients", <i>The New England Journal of Medicine</i> , October 29, 1998, Pages 1269-1276, Vol. 339, No. 18		
	C87	PISETSKY, D.S. et al., "Stimulation of <i>in vitro</i> proliferation of murine lymphocytes by synthetic oligodeoxynucleotides", <i>Molecular Biology Reports</i> , 1993, Pages 217-221, Vol. 18, Kluwer Academic Publishers Belgium		
	C88	PISETSKY, D.S. et al., "Stimulation of Murine Lymphocyte Proliferation by a Phosphorothioate Oligonucleotide with Antisense Activity for Herpes Simplex Virus", <i>Life Sciences</i> , 1994, Pages 101-107, Vol. 54, Pergamon Press USA		
	C89	PISETSKY, D.S., "Immunologic Consequences of Nucleic Acid Therapy", <i>Antisense Research and Development</i> , 1995, Pages 219-225, Vol. 5, Mary Ann Liebert, Inc.		
	C90	PISETSKY, D.S., "The Immunologic Properties of DNA", <i>The Journal of Immunology</i> , 1996, Pages 421-423, Vol. 156, No. 2, The American Association of Immunologists		
	C91	RAZ, E. et al., "Preferential induction of a Th1 immune response and inhibition of specific IgE antibody formation by plasmid DNA immunization", <i>Proc. Natl. Acad. Sci. USA</i> , May 1996, Pages 5141-5145, Vol. 93		
	*C92	REN, J. et al., "Establishment of immuno-PCR technique for the detection of tumor associated antigen MG7-Ag on the gastric cancer cell line", <i>Zonghua Zhong Liu Za Zhi</i> , July 1994, Pages 247-250, Vol. 16, No. 4, Chinese		
	C93	ROMAN, M. et al., "Immunostimulatory DNA sequences function as T helper-1-promoting adjuvants", <i>Nature Medicine</i> , August 1997, Pages 849-854, Vol. 3, No. 8		
	C94	ROSENBERG, E.S. et al., "Vigorous HIV-1-Specific CD4+ T Cell Responses Associated with Control of Viremia", <i>Science</i> , November 21, 1997, Pages 1447-1450, Vol. 278		
	C95	ROSENBERG, E.S. et al., "Immune control of HIV-1 after early treatment of acute infection", <i>Nature</i> , September 28, 2000, Pages 523-526, Vol. 407		
	C96	RUIZ, L. et al., "Structured treatment interruption in chronically HIV-1 infected patients after long-term viral suppression", <i>AIDS</i> , 2000, Pages 397-403, Vol. 14, Lippincott Williams & Wilkins		
	*C97	SATO, Y. et al., "Immunostimulatory DNA Sequences Necessary for Effective Intradermal Gene Immunization", <i>Science</i> , July 19, 1996, Pages 352-354, Vol. 273		
	*C98	SCHNELL, N. et al., "Identification and characterization of a <i>Saccharomyces cerevisiae</i> gene (PAR1) conferring resistance to iron chelators", <i>Eur. J. Biochem.</i> , 1991, Pages 487-493, Vol. 200, FEBS		
	C99	SCHOOF, M., "Small Steps - A Limited Experiment Opens New Approach in Fight Against HIV", <i>Wall Street Journal</i> , September 28, 2000		
	C100	SHAFER, R.W. et al., "Highly active antiretroviral therapy (HAART) for the treatment of infection with human immunodeficiency virus type 1", <i>Biomed. & Pharmacother.</i> , 1999, Pages 73-86, Vol. 53, Elsevier, Paris		
	C101	SHIRAKAWA, T. et al., "The Inverse Association Between Tuberculin Responses and Atopic Disorder", <i>Science</i> , January 3, 1997, Pages 77-79, Vol. 275		
	*C102	SHUBBERT et al., "Ingested Foreign (phage M13) DNA Survives Transiently in the Gastrointestinal Tract and Enters the Bloodstream of Mice", <i>Mol. Gen. Genet.</i> , 1994, Pages 495-504, Vol. 242		
	C103	SPARWASSER, T. et al., "Macrophages sense pathogens via DNA motifs: induction of tumor necrosis factor- α -mediated shock", <i>Eur. J. Immunol.</i> , 1997, Pages 1671-1679, Vol. 27, VCH Verlagsgesellschaft mbH		
	*C104	STEIN, C.A. et al., "Oligodeoxynucleotides as Inhibitors of Gene Expression: A Review", <i>Cancer Research</i> , 1988, Pages 2659-2668, Vol. 48		

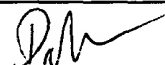


3/20/03

	* C105	STULL, R.A. et al., "Antigene, Ribozyme and Aptamer Nucleic Acid Drugs: Progress and Prospects", <i>Pharmaceutical Research</i> , 1995, Pages 465-483, Vol. 12, No. 4		
	* C106	TANAKA, T. et al., "An Antisense Oligonucleotide Complementary to α -Sequence in IG2b Germline Transcripts Stimulates B Cell DNA Synthesis, and Inhibits Immunoglobulin Secretion", <i>J. Exp. Med.</i> , 1992, Pages 597-607, Vol. 175		
	* C107	TIGHE, H. et al., "Conjugation of protein to immunostimulatory DNA results in a rapid, long-lasting and potent induction of cell-mediated and humoral immunity", <i>Eur. J. Immunol.</i> , 2000, Pages 1939-1947, Vol. 30, Wiley-VCH Verlag GmbH		
	* C108	TOKUNAGA, T., "A Synthetic Single-stranded DNA, Poly(dG,dC), Induces Interferon- α/β and γ , Augments Natural Killer Activity, and Suppresses Tumor Growth", <i>Jpn. J. Cancer Res. (GANN)</i> , 1988, Pages 682-686, Vol. 79, No. 6		
	* C109	TOKUNAGA, T. et al., "Synthetic Oligonucleotides with Particular Base Sequences from the cDNA Encoding Proteins of <i>Mycobacterium bovis</i> BCG Induce Interferons and Activate Natural Killer Cells", <i>Microbiol. Immunol.</i> , 1992, Pages 55-66, Vol. 36, No. 1		
	C110	UHLMANN, E. et al., "Antisense Oligonucleotides: A New Therapeutic Principle", <i>Chemical Reviews</i> , June 1990, Pages 543-584, Vol. 90, No. 4		
	* C111	VERMA, I.M. et al., "Gene therapy-promises, problems and prospects", <i>Nature</i> , September 18, 1997, Pages 239-242, Vol. 389		
	C112	WAGNER, R.W., "Gene inhibition using antisense oligodeoxynucleotide", <i>Nature</i> , November 24, 1994, Pages 333-335, Vol. 372		
	* C113	WALLACE, R.B. et al., "Oligonucleotide Probes for the Screening of Recombinant DNA Libraries", <i>Methods in Enzymology</i> , 1987, Pages 432-442, Vol. 152		
	* C114	WEINER, G.J. et al., "Immunostimulatory Oligodeoxynucleotides Containing the CpG Motif are Effective as Immune Adjuvants in tumor Antigen Immunization", <i>Proc. Natl. Acad. Sci. USA</i> , 1997, Pages 10833-10837, Vol. 94		
	C115	WEISS, R., "Upping the Antisense Ante - Scientists bet on profits from reverse genetics", <i>Science News</i> , 1991, Pages 108-109, Vol. 139		
	* C116	WHALEN, R., "DNA Vaccines for Emerging Infectious Disease: What If?", <i>Emerging Infectious Disease</i> , 1996, Pages 168-175, Vol. 2, No. 3		
	* C117	WU, G.Y. et al., "Receptor-mediated Gene Delivery and Expression <i>in vivo</i> ", <i>J. Biological Chemistry</i> , 1988, Pages 14621-14624, Vol. 263		
	C118	WU-PONG, S., "Oligonucleotides: Opportunities for Drug Therapy and Research", <i>Pharmaceutical Technology</i> , 1994, Pages 102-114, Vol. 18		
	C119	YAMAMOTO, S. et al., "In vitro Augmentation of Natural Killer Cell Activity and production of Interferon- α/β and γ with Deoxyribonucleic Acid Fraction from <i>Mycobacterium bovis</i> BCG", <i>Jpn. J. Cancer Res. (Gann)</i> , July 1988, Pages 866-873, Vol. 79		
	* C120	YAMAMOTO, S. et al., "DNA from Bacteria, but not from Vertebrates, Induces Interferons, Activates Natural Killer Cells and Inhibits Tumor Growth", <i>Microbiol. Immunol.</i> 1992, Pages 983-997, Vol. 36, No. 9		
	* C121	YAMAMOTO, S. et al., "Unique Palindromic Sequences in Synthetic Oligonucleotides are Required to Induce INF and Augment INF-Mediated Natural Killer Activity", <i>The Journal of Immunology</i> , June 15, 1992, Pages 4072-4076, Vol. 148, No. 12, The American Association of Immunologists USA		
	* C122	YAMAMOTO, S., "Mode of Action of Oligonucleotide Fraction Extracted from <i>Mycobacterium bovis</i> BCG", <i>Kekkaku</i> , 1994, Pages 29-32, Vol. 69, No. 9		
	* C123	YAMAMOTO, T. et al., "Ability of Oligonucleotides with Certain Palindromes to Induce Interferon Production and Augment Natural Killer Cell Activity is Associated with Their Base Length", <i>Antisense Res. and Devel.</i> , 1994, Pages 119-123, Vol. 4		
	* C124	YAMAMOTO, T. et al., "Lipofection of Synthetic Oligodeoxyribonucleotide having a Palindromic Sequence of AACGTT to Murine Splenocytes Enhances Interferon Production and Natural Killer Activity", <i>Microbiol. Immunol.</i> , 1994, Pages 831-836, Vol. 38, No. 10		
	* C125	YAMAMOTO, T. et al., "Synthetic Oligonucleotides with Certain Palindromes Stimulate Interferon Production of Human Peripheral Blood Lymphocytes <i>in vitro</i> ", <i>Jpn. J. Cancer Res.</i> , August 1994, Pages 775- 779, Vol. 85		
	* C126	YEW et al., "Contribution of Plasmid DNA to Inflammation in the Lung After Administration of Cationic Lipid: pDNA Complexes", <i>Hum. Gene. Ther.</i> , 1999, Pages 223-234, Vol. 10, No. 2, Abstract		
	C127	YI, A.K., et al., "IFN- γ Promotes IL-6 and IgM Secretion in Response to CpG Motifs in Bacterial DNA and Oligodeoxynucleotides", <i>The Journal of Immunology</i> , 1996, Pages 558-564, Vol. 156, No. 2, The American Association of Immunologists		
	C128	YI, A.K. et al., "Rapid Immune Activation by CpG Motifs in Bacterial DNA-Systemic Induction of IL-6 Transcription Through an Antioxidant-Sensitive Pathway", <i>The Journal of Immunology</i> , 1996, Pages 5394-5402, Vol. 157, The American Association of Immunologists		

3/20/03

	C129	ZELPHATI, O. et al., "Inhibition of HIV-1 Replication in Cultured Cells with Antisense Oligonucleotides Encapsulated in Immunoliposomes", <i>Antisense Research and Development</i> , 1993, Pages 323-338, Vol. 3, Mary Ann Liebert, Inc.		
	C130	ZHAO, Q. et al., "Comparison of Cellular Binding and Uptake of Antisense Phosphodiester, Phosphorothioate, and Mixed Phosphorothioate and Methylphosphonate Oligonucleotides", <i>Antisense Research and Development</i> , 1993, Pages 53-66, Vol. 3, Mary Ann Liebert, Inc.		
	C131	ZHAO, Q. et al., "Stage-Specific Oligonucleotide Uptake in Murine Bone Marrow B-Cell Precursors", <i>Blood</i> , December 1, 1994, Pages 3660-3666, Vol. 84, No. 11, The American Society of Hematology		

EXAMINER 	DATE CONSIDERED 3/20/03
--	-------------------------

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. 08/386,063, filed February 7, 1995 now U.S. Patent No. 6,194,388 B1, issued February 27, 2001 and Serial No. 09/415,142, filed October 9, 1999, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).